

ABSTRACT

A method and apparatus is disclosed for improving high frequency performance of an amplifier, such as for example, a current mirror. In one embodiment, a delay element is introduced in a current mirror signal path to account for signal propagation delay that may exist in one or more alternative signal paths. The delay element maintains desired phase alignment at a cascade node of the current mirror thereby establishing, in one embodiment, the cascode node (V_c) in an AC ground state. To extend current mirror high frequency capability an embodiment is disclosed having cross-coupled capacitors, active elements, or one or more other devices configured to provide positive feedback to one or more current mirror inputs. The positive feedback may be selectively configured to increase the operational bandwidth of the current mirror.

15